

AMENDMENT TO CLAIMS

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1. (Currently Amended) An apparatus for processing ~~increasing a specific density and an energy content of a~~ gas comprising:

- a pressure resistant piping system equipped with means for closing and opening said piping system;
- means for filling up said piping system with a gas and means for compressing said gas to a desired pressure;
- means for generating a ~~submerged~~ magnetic field within said piping system;
- means for delivering an electric power to said means for generating the ~~submerged~~ magnetic field within said piping system;
- means for recirculating said gas through said means for generating the ~~submerged~~ magnetic field; and
- means for collecting a resultant processed gas;

~~wherein the resulting processed gas has a specific density and an energy content bigger than corresponding values of the gas originally first filled into the piping system.~~

2. (Currently Amended) The apparatus according to Claim 1, wherein the electric current of said means for generating the ~~submerged~~ magnetic field is continuous.

3. (Currently Amended) The apparatus according to Claim 1, wherein the electric current of said means for generating the ~~submerged~~ magnetic field is alternating.

4. (Currently Amended) The apparatus according to Claim 1, wherein the electric current of said means for generating the ~~submerged~~ magnetic field is pulsing.

5. (Original) The apparatus according to Claim 1, wherein said gas is hydrogen.

6. (Original) The apparatus according to Claim 1, wherein said gas is oxygen.

7. (Original) The apparatus according to Claim 1, wherein said gas is a non-combustible gas.

8. (Original) The apparatus according to Claim 1, wherein said gas is a gaseous hydrocarbon fuel.

9. (Original) The apparatus according to Claim 1, wherein said gas is a liquid vapor.

10. (Currently Amended) The apparatus according to Claim 1, further comprising:
means for restricting the flow of said gas along a slit surrounding said means for generating the ~~submerged~~ magnetic field.

11. – 32. (Canceled)

33. (Currently Amended) A method for processing ~~increasing a specific density and an energy content of a~~ gas comprising:

providing a pressure resistant piping system equipped with means for closing and opening said piping system;

providing means for filling up said piping system with a gas and means for compressing said gas to a desired pressure;

providing means for generating a ~~submerged~~ magnetic field within said piping system;

providing means for delivering an electric power to said means for generating the ~~submerged~~ magnetic field;

providing means for recirculating said gas through said means for generating the ~~submerged~~ magnetic field;

providing means for collecting a resultant processed gas; and

filling said piping system with the gas, recirculating the gas through the means for generating a **submerged** magnetic field within said piping system and collecting the resultant processed gas;

~~wherein the resulting processed gas has a specific density and an energy content bigger than corresponding values of the gas originally first filled into the piping system.~~

34. (Currently Amended) The method according to Claim 33, wherein the electric current of said means for generating the **submerged** magnetic field is continuous.

35. (Currently Amended) The method according to Claim 33, wherein the electric current of said means for generating the **submerged** magnetic field is alternating.

36. (Currently Amended) The method according to Claim 33, wherein the electric current of said means for generating the **submerged** magnetic field is pulsing.

37. (Original) The method according to Claim 33, wherein said gas is hydrogen.

38. (Original) The method according to Claim 33, wherein said gas is oxygen.

39. (Original) The method according to Claim 33, wherein said gas is a non-combustible gas.

40. (Original) The method according to Claim 33, wherein said gas is a gaseous hydrocarbon fuel.

41. (Original) The method according to Claim 33, wherein said gas is a liquid vapor.

42. (Currently Amended) The method according to Claim 33, further comprising:

providing means for restricting the flow of said gas along a slit surrounding said means for generating the ~~submerged~~ magnetic field.

43.-55. (Canceled)

56. (Currently Amended) The apparatus according to Claim 1, wherein said means for generating the ~~submerged~~ magnetic field is at least one pair of electrodes placed within said piping system and capable of delivering an electric arc within an interior of the piping system.

57.- 58. (Canceled)

59. (Currently Amended) The method according to Claim 33, wherein said means for generating the ~~submerged~~ magnetic field is at least one pair of electrodes placed within said piping system and capable of delivering an electric arc within an interior of the piping system.

60.-61. (Canceled)